CLAIMS

1. A method of controlling the transmission timing of a wireless transceiver in a wireless communications system, including:

receiving a burst transmission from the transceiver on a time-slotted channel, the burst transmission including a time slot indication indicating a time slot within which the burst was transmitted;

calculating from the timing of reception of said burst transmission a timing correction value for the transceiver so as to synchronise the transmission timing of said transceiver with a reference timing; and

transmitting said timing correction value to the transceiver.

2. A method as claimed in claim 1, further including, prior to said receiving step:

transmitting to the transceiver a time slot allocation indicating a plurality of slots in the channel; wherein the time slot indication indicates one of said time slots.

3. A method as claimed in claim 1 or claim 2, wherein said plurality of time slots form a sequential block having a total length greater than the maximum variation in propagation delay in said wireless communications system.

4. A method of controlling the transmission timing of a wireless transceiver in a wireless communications system, including:

selecting a time slot in a time-slotted channel;

transmitting from the transceiver a burst transmission in said selected time slot, the transmission including a time slot indication indicating the selected time slot;

receiving at the transceiver a timing correction value derived from the timing of the burst transmission; and

adjusting the timing of a subsequent transmission by the transceiver according to said timing correction value.

5. A method as claimed in claim 4, further including:

receiving at the transceiver a time slot allocation indicating a plurality of time slots in the channel; wherein the selected time slot is selected from said plurality of time slots.

6. A method as claimed in claim 4 or 5, wherein said selected time slot is selected randomly or pseudo-randomly.

7. A method of controlling the transmission timing of a wireless transceiver in a wireless communications system, including:

transmitting a burst transmission from the transceiver;

receiving at the transceiver a timing correction value; and

controlling a subsequent transmission by the transceiver according to the timing correction value and according to a timing uncertainty value as a function of time elapsed since reception of the timing correction value.

8. A method as claimed in claim 7, wherein the timing uncertainty value is determined by a timing uncertainty rate received by the transceiver.

9. A method as claimed in claim 7 or claim 8, wherein if the timing uncertainty value exceeds a predetermined limit, the transceiver is inhibited from transmission in a time slot allocated to that transceiver until a further timing correction value is received.

10. A method of controlling the transmission timing of a transceiver in a wireless communications system, including:

transmitting to said transceiver a channel allocation signal indicating a channel dedicated that transceiver and not available to other transceivers in said system;

receiving from said transceiver a transmission substantially in the dedicated channel allocation;

detecting a timing error in said transmission; and

transmitting to said one of said transceivers a timing correction signal dependent on said timing error, for correction of the transmission timing of said transceiver.

11. A wireless link signal comprising a data burst including in temporal sequence:

an initial predetermined synchronisation sequence;

a data field carrying the data content of the burst; and

a final predetermined synchronisation sequence.

12. A wireless link signal comprising a data burst including in temporal sequence:

an first predetermined synchronisation sequence;

a data field carrying substantially all of the data content of the burst; and

a second predetermined synchronisation sequence.

13. A signal as claimed in claim 11 or 12, wherein the burst includes an initial preamble preceding the first synchronisation sequence.

14. A signal as claimed in any one of claims 11 to 13, wherein the burst is transmitted in a time-slotted channel.

15. A signal as claimed in claim 14, wherein the channel comprises a plurality of slots sequentially separated by a guard band, wherein the length of the guard band is less than the maximum relative timing error between transmissions in adjacent time slots.

16. A method of transmitting a signal over a wireless link, comprising transmitting a signal as claimed in any one of claims 11 to 15.

17. A method of receiving a signal over a wireless link, comprising receiving a signal as claimed in any one of claims 11 to 15.

18. A method of transmitting data over a wireless communications link, comprising:

detecting a timing reference signal;

receiving a timing slot allocation over the wireless communications link;

and transmitting said data according to said timing reference signal and said timing slot allocation, in a time-slotted channel having a format including periodic blocks of constant length each occupied by either one long burst or an integral number of short bursts of equal length.

19. A method of controlling the transmission of data over a time-divided multiple access channel of a wireless communications link, comprising:

determining an allocation scheme of said channel to each of a plurality of transceivers, and transmitting said allocation scheme to said transceivers,

whereby said transceivers transmit data in said channel with a format including periodic blocks of constant length each occupied by either one long burst or an integral number of short bursts of equal length.

20. A wireless link signal having a format including periodic blocks of constant length each occupied by either one long burst or an integral number of short bursts of equal length.

21. A method of transmitting data over a wireless communications link, comprising:

transmitting the data in one or more short bursts and/or one or more long bursts, the short bursts comprising 112 modulated data symbols and having a total length of approximately 5 ms, and the long bursts comprising 596 data symbols and having a total length of approximately 20 ms.

22. A signal comprising a burst transmission having a total length of approximately either 5 or 20 ms and comprising 112 or 596 data symbols respectively.

23. Apparatus arranged to perform the method of any one of claims 1 to 10, 16 to 19 or 21.

24. A method substantially as herein described with reference to Figures 7, 8a and 8b of the accompanying drawings.

25. A signal substantially as herein described with reference to Figure 5 or Figure 6 of the accompanying drawings.